

Virgin Media O2 response to Ofcom Statement and further Consultation:

Enabling satellite direct to device services in mobile spectrum bands

October 2025

INTRODUCTION

Virgin Media O2 ("VMO2") welcomes the opportunity to respond to Ofcom's Statement and further consultation on enabling satellite direct to device services in mobile spectrum bands.¹

GENERAL COMMENTS

We support Ofcom's work to introduce a Regulatory authorisation framework to enable the introduction of Direct to Device ("D2D") services in the UK. These services can deliver benefits to consumers and businesses in the form of mobile connectivity to supplement existing terrestrial coverage.

The remainder of our response focusses on Ofcom's specific questions.

RESPONSE TO SPECIFIC QUESTIONS

Question 1: Do you agree with our proposed additional technical conditions for using 2.6 GHz D2D services in order to protect 2.7-3.1 GHz radars?

We anticipate that individual Satellite Operators may support various spectrum bands depending upon their capability and roadmap. The 2.6 GHz spectrum that VMO2 currently holds is unpaired, Time Division Duplex ("TDD"). We would expect there to be significant technical challenges in using TDD spectrum for LEO Satellite usage due to the significant propagation delay as a result of the frame timings required between the transmit and receive slots, when compared to using more suitable, paired, Frequency Division Duplex ("FDD") spectrum.

Restrictions that may be required in order to protect existing radar in 2.7-3.1 GHz would add further technical complexity. We therefore conclude usage of our 2.6 GHz spectrum for D2D services would be unlikely to be feasible. We have no further comments specific to Ofcom's proposed additional technical conditions to protect 2.7-3.1 GHz radars.

Question 2: Do you have any comments relating to the proposed licence conditions?

Paragraph 2 states that the Licensee shall ensure that the provision of D2D services shall not cause or contribute to harmful interference to any wireless telegraphy. We believe that "harmful" should be replaced by "undue" and "any" should be replaced by "authorised". This terminology will be consistent with the existing wording in paragraph 7 and align with clauses in existing mobile spectrum licences.

¹ <u>Statement and further consultation: Enabling satellite direct to device services in mobile spectrum bands</u>

Section 3 states that, prior to providing D2D services, the Licensee shall procure (by entering into a contract with the undertaking operating the mobile satellite system) that the undertaking complies with the provisions set out in paragraphs 6 – 13. Further, it states that in the event that the contract terminates for whatever reason, the Licensee shall cease to provide D2D services. We request Ofcom confirms that, in the event of a contract termination, the requirement to cease to provide D2D services would only apply to services provided by the undertaking operating the satellite system as part of that specific contract. This specific application of the requirement to cease to provide D2D services, would therefore not apply to D2D services that may be agreed to be provided either through a subsequent replacement contract with the existing Satellite Operator, or by an alternative Satellite Operator (that may be provided through a separate contract that contains the required provisions set out in Ofcom's licence variation schedule). In practice, this would enable continuity of the provision of D2D services in the event of a licensee switching to an alternative Satellite Operator, for example as a result of a commercial decision, or in the event of the existing Satellite Operator ceasing to continue to provide D2D services for commercial reasons, or in the event of its business ceasing to operate.

We request Ofcom confirms that Paragraph 9 b) will not be included in a licence variation schedule unless the licence is varied to include authorisation of frequencies in the 2.6 GHz band to be used to provide D2D services.

We understand and appreciate that Ofcom's analysis and decision making in respect to coexistence and setting thresholds and limits, seeks to balance the benefits that can be delivered to consumers and businesses from new and innovative services, with the need to protect existing authorised services from undue interference. However, Ofcom is aware that setting overly conservative limits can reduce benefits by restricting the levels of coverage and services that might otherwise be delivered using licensed mobile spectrum.

We would highlight that in Ofcom's 2021 Statement, Supporting the UK's wireless future: Our spectrum management strategy for the 2020s, Ofcom stated that increased realism in coexistence can be beneficial and deliver a more efficient use of spectrum. We agree, and believe that Ofcom should use this approach, where possible, when setting out and reviewing technical conditions. We observe that for some licensed mobile spectrum, there has been a historical tendency to rely on technical modelling, assumptions, and the use of conservative models, over evidence of real-world equipment performance. This has led to some unnecessarily stringent technical conditions limiting efficient use of spectrum and the benefits that can be delivered.

In light of Ofcom's decision to set PFD limits that are more conservative than the existing thresholds used for cross-border coordination for terrestrial mobile networks, in all but one spectrum band, we request that Ofcom confirms it will remain open to reviewing technical conditions including the PFD limits, as appropriate, for example in light of evidence from real-

world deployment of D2D services. Actual equipment performance may inform analysis and decisions that could lead to improved levels of coverage and service being delivered under less conservative limits, maximising benefits for the UK, without causing undue interference.

We note that the draft licence variation schedule is missing section number 11. We request Ofcom clarifies if this is a simply a numbering error, or if there is additional text that is missing from the schedule.

Question 3: Do you have any comments on our drafting of the Proposed Regulations?

Please give reasons supported by evidence for your views.

We support Ofcom's proposed Regulations to exempt mobile handsets and other SIMenabled devices from the requirement to be licensed when established, installed or used for D2D services in the UK.

Question 4: Question 4: Do you have any comments relating to any other matter in this Notice of Proposed Regulations?

We have no further comments.